

USSN 09/988, 689
Response



Docket No. THOLAM P167US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re **PATENT**

Application of: : **Earl Alexander Culham**

Serial No. : **09/988,689**

Title : **Method of Linking Web Pages**

Filed : **November 20, 2001**

Art Unit : **2178**

Examiner : **Kyle R. Stork**

Assistant Commissioner for Patents
Washington, D.C. 20231

May 17, 2005

Faxed to 571-273-4130
7 pages in total

Dear Sir:

I have attached to this letter a REVOCATION OF APPOINTMENT OF AGENT. Please talk directly with me in all future matters relating to this application.

You already have my APPLICANT INITIATED INTERVIEW REQUEST FORM. Please arrange a telephone conference call between you, Steve Hong, and myself at your earliest convenience. I will try to make myself available to match your schedule.

I am including further written discussions in regards to your objections. Please review them before our telephone conference call, as I hope they will address your concerns.

REMARKS

Supplementary Links are not Hypertext Links.

The largest point of confusion appears to be that the examiner is confusing Supplementary Links with Hypertext Links, and thus missing the point of this invention.

As is well known in the prior art, Hypertext Links are pointers. They point from a position on the primary web page to a target web page. In standard Hypertext Markup Language (HTML),

Hypertext Links have an anchor in the primary web page, and use a Uniform Resource Locator (URL) to specify the target web page. The anchor provides the visible activated region to which the user points and then “clicks”, indicating their desire to follow that particular URL to where it points. It is a necessary feature of an anchor that it takes up space on the visual rendering on the primary web page. The user must tell the system that they wish to select one particular anchor over all others. The user does this by selecting that anchor with some pointing method, and to accomplish that each anchor must be selectably separate from every other anchor.

I call this invention Supplementary Links. They are also pointers. But, Supplementary Links do not have an anchor. Instead of being anchored to a primary web page, they are associated with it. Unlike anchors which need to take up space on the visual rendering of the primary web page, associations do not need to take up any visible space when the primary web page is being displayed. This feature makes Supplementary Links very distinct from Hypertext Links. Because they are without an anchor, Supplementary Links create new features and problems which do not exist within the prior art of Hypertext Links.

For instance, since the anchor provides the target which is used to select a Hypertext Link, and since a Supplementary Link does not have an anchor, then Supplementary Links require some additional mechanism for rendering them visible and selectable. In the preferred implementation, the user action to initiate this mechanism would be a SuperClick, such as holding down the Ctrl key while simultaneously clicking the mouse button. The visual rendering system, often called a Browser, could be programmed to respond to this SuperClick by searching through the Supplementary Links associated with this primary web page, selecting some of the Supplementary Links to display, and converting those specific anchorless Supplementary Links into normal anchored Hypertext Links, making them visible and selectable.

For anchors to work as they are defined to do, anchors must take up space on the visual rendering of the web page, and by definition they cannot overlap one another. These are useful features as they make it possible for the user to select each Hypertext Link individually. This also places an implicit limitation on the number of Hypertext Links, because they each consume some piece of this limited resource. Supplementary Links have no anchor and thus do not need to take up any space on the visual rendering of the web page. Supplementary Links can overlap. Multiple Supplementary Links can be associated with the same point within a web page, or, even more extreme, multiple Supplementary Links can be associated with the “space” between pixels.

To implement this invention, there are engineering problems to be clarified by a person skilled in the art before they can implement Supplementary Links. How is the “association” created? Where do we physically store the Supplementary Links? How are the Supplementary Links converted into a form that makes them selectable? What algorithms are used to filter the massive number of potential Supplementary Links down to a number small enough for a human to be able to handle? In the original patent application, several potential solutions have been provided to each of these questions. These should be sufficient to allow one skilled in the art to build a working version of this invention.

The examiner has cited several prior arts, each of which serve to underscore that the examiner has not yet understood the important features of this invention.

The reference to “consulting.com” was particularly vexing because that reference referred to some previous and irreproducible state of that consulting.com web site. However, after working through that difficulty, it became obvious that consulting.com does not provide anything new over Hypertext Links in general and certainly does not anticipate Supplementary Links. All consulting.com serves to illuminate is the well known prior art (used by every graphical interface) of having an activated region on the screen and a method for the user to select that activated region thus indicating their wish to perform some action. In HTML, this activated region is called an Anchor, and the action requested is to follow the URL to the target web page. Supplementary Links do not have an anchor. Supplementary Links have no activated region on the visual rendering of the web page. Therefore, while consulting.com does anticipate the anchors used by Hypertext Links, consulting.com does not anticipate the anchorless nature of Supplementary Links.

One of the engineering problems mentioned above is that a method is required to allow the user to indicate that they want some of the Supplementary Links to be converted from Supplementary Links into regular Hypertext Links, thus making them visible and selectable. I have provided several examples, such as a button on the task bar, a button on the web page, or a SuperClick created by combining pressing a key with a mouse click. All these use actions are well known in the prior art. What was not known before this invention was the specific action which is being requested by that user action. No prior art embodies the action of converting Supplementary Links into Hypertext Links, mostly because no prior art anticipates Supplementary Links. I am not claiming these user actions are novel. I am claiming that a user can use these user initiated methods to request the system to perform a novel action, namely to make some Supplementary Links visible and selectable, in essence by converting them into Hypertext Links.

Several of the examiner’s cited references deal with aspects of the anchor. Some were for controlling the size and shape of the anchor (Adapathya). Some were for controlling the visual emphasis used to indicate that an anchor is available for selection (Geilfuss, Norris) or even whether a particular anchor is primed to be selected in preference over other anchors (Logan). **Supplementary Links do not have anchors.** Therefore, these prior arts do not anticipate the anchorless nature of Supplementary Links.

The examiner cited Yahoo.com, especially in relation to having a database for storing a multiplicity of links and the filtering of those links into a number small enough to be managed by a user. There are three distinct things being confused here, namely (1) an URL, (2) a Hypertext Link and (3) a Supplementary Link. An URL is the address of a web page. A Hypertext Link is formed by combining an anchor with an URL. A Supplementary Link is formed by creating an anchorless association between a location on a primary web page and an URL.

Yahoo.com is a database. Its database contains addresses of web pages (URLs) along with some of the content of those web pages (keywords) put there by the designer of the web page. Its database does not contain Supplementary Links. Supplementary Links are an enabling technology. It will be possible to use Supplementary Links to create a new and improved Yahoo.com (with new search features which cannot exist until made possible by aspects of this invention). Yahoo.com, as it exists in the prior art, does not implement Supplementary Links and neither can it be used to create Supplementary Links.

Yahoo.com is an example of a database. As mentioned before, in implementing this invention there are engineering problems to be solved by a person skilled in the art. Two of these problems relate to where the Supplementary Links are physically stored and how the potentially huge number of Supplementary Links can be filtered down to a number a user can reasonably work with. Both of these engineering problems can reasonably be solved by using the well known prior art of databases. I am not claiming that databases are novel. I am claiming that databases can be used to store and filter these novel structures called Supplementary Links.

The examiner cited Excel on two distinct points, as an example of a system using user initiated commands, and as a system for storing data structures. I am not claiming user initiated commands per se. I am claiming the specific use of user initiated commands when they are used to indicate that the user would like some Supplementary Links to become visible and selectable, in essence turning the Supplementary Links into normal Hypertext Links. I am also not claiming a method of storing data structures per se. I lay claim to any method of storing a very specific data structure, namely the storing of Supplementary Links.

The examiner cited "Logan et al". Again, this does not anticipate Supplementary Links. This is a front-end system intended for use on dedicated kiosk computers. Its purpose is to intercept and cripple some features which would otherwise be available in a general purpose browser. It also describes an authoring system to help designers work within the limitations imposed. It describes the ability to rewrite the URL inside of a Hypertext Link. It also describes the ability to remove a Hypertext Link. It even describes the ability to change the visual cues associated with a displayed anchor. It does not anticipate the anchorless associations which are Supplementary Links. Therefore, it also cannot anticipate any method of converting Supplementary Links into Hypertext Links.

The examiner cited Musciano, which is basically a description of the HTML language as it existed at the time of the invention. As mentioned before, in implementing this invention there are engineering problems to be solved by a person skilled in the art. One such problem is to determine where to store the Supplementary Links. In my application in FIGURE 6, I show an example of an inferior implementation which stores the Supplementary Links within the source code for the primary web page. My example would be implemented by extending the prior art of the HTML language to include a new keyword on the anchor tag (ALTREF="url"). The examiner's suggestion is along similar lines, and would extend the HTML language by using a different new keyword on the anchor tag (HIDDEN). In neither case is this the complete

implementation of Supplementary links. There are many engineering problems to solve in the creation and use Supplementary Links. These engineering problems need to be solved by a person skilled in the art before they can implement Supplementary Links. The examiner's skill in the art of HTML has been sufficient to propose an alternative syntax to my extension to the HTML language, and yes I would claim that this patent should cover an implementation based on the examiner's proposed extension as his extension is not materially different from my proposed extension. In either case, this proposed extension only addresses an implementation detail in response to the specific question of where to store the Supplementary Links. Many other questions remain. How is the "association" created? How are the Supplementary Links converted into a form that makes them selectable? What algorithms are used to filter the massive number of potential Supplementary Links down to a number small enough for a human to be able to handle? There are many solutions to these engineering problems which are solvable by a person skilled in the art. Without first having the invention of these anchorless associations called Supplementary Links, no person would seek to ask or answer these questions. This reference by the examiner clearly confirms that the prior art is not sufficient to describe Supplementary Links without extension, and that this invention is an improvement on that prior art.

The examiner cited several references in which I can find nothing close to being relevant to the present invention.

- For instance, "Gray" is a description of the inner workings of a system used to create a class of computer game commonly known as an "Adventure" game. This form of game was widely available on many University's mainframe computer systems in the 70's. This reference would appear to be an attempt to port it onto an Amiga computer. It doesn't even have anything to do with hypertext links or web pages. There is nothing in that document which relates to the anchorless nature of Supplementary Links in any way.
- "Walden" is a method of adding Hypertext Links to "help" pages. Again, nothing relates to Supplementary Links.
- "Adams" is a method of automating the selecting of Hypertext Links. Nothing is close to the concept of Supplementary Links.
- With "Srinivasa", I can at least forgive the examiner for getting lost in the details of this particular prior art. However, it still boils down to this. There is nothing in there which anticipated the anchorless associations I call Supplementary Links.
- "Christopher", like "consulting.com" is just a way of defining active areas on a screen.

Supplementary Links are created by associating an URL in an anchorless way with a web page. This is a novel idea and is at the root of this invention. Because of that, the following comments about obviousness may well be moot. The examiner has not produced any prior art which speaks to this concept. If no such reference can be produced, then clearly there can be no rejection based on whether or not it was obvious to combine two prior arts, since one of the ideas is not in the prior arts. I include it here for completeness.

In reference to the examiner's various rejections on the grounds of obviousness, I believe the examiner is misapplying the concept of obvious. There is a very large distinction between

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whether an invention is obvious before it has been invented versus whether the value of an invention is obvious after it has been invented. Section 35 U.S.C. 103(a) states "... *the subject matter as a whole would have been obvious at the time of the invention was made to a person having ordinary skill in the art ...*". This clearly focuses on the subject matter of the invention and does not even allude to the perceived value of the invention.

Several of the examiner's objections have the following form:

It would have been obvious to combine A and B because the resulting combination would be valuable.

This clearly does not address the intention of Section 35 U.S.C. 103(a). Nothing in the examiner's argument makes any reference to why he believes a person of ordinary skill would have obviously combined that specific combination. Instead, his argument focuses on whether the value of the invention becomes obvious after the invention has been explained. No matter how obvious the value of an invention is after it has been explained, this is not valid grounds for claiming that the invention itself was obvious before it had been explained.

On the contrary, given the large number of people worldwide with ordinary skill in the art of graphical interfaces and Hypertext Links, and given the obvious value of this invention once it has been explained, the fact that there is no reference in the prior art to the anchorless associations which are an essential part of this invention speaks strongly to my claim that these Supplementary Links were not obvious at the time of this invention.

In view of the foregoing arguments, I respectfully submit that the present application is now in a condition for allowance. I, therefore, request the early issue of a Notice of Allowance.

If you are aware of any further changes which can be made to bring this application into proper condition for allowance, then please bring them to my attention either during our conference call or by direct discussion with me.

Respectfully submitted,

Earl Alexander Culham

A handwritten signature in black ink, appearing to read 'EAC', with a long horizontal flourish extending to the right.



UNITED STATES

REVOCATION OF APPOINTMENT OF AGENT

I, the below named Applicant, for patent under Serial Number 09/988,689 filed in the United States Patent and Trademark Office on November 20, 2001 titled METHOD OF LINKING WEB PAGES, do hereby revoke the appointment of the attorneys DAVIS & BUJOLD, P.L.L.C with respect to the prosecution of this application.

Please address all future correspondence to myself at:

12539 – 161 Avenue
Edmonton, Alberta, Canada
T5X 4w7

Please direct all telephone calls to myself at:

(780) 456-6657

Dated at Edmonton, Alberta, Canada, this 17th day of May, 2005.

Earl Alexander Culham